Form C₃104 Rev. 33/07

VALUE ENGINEERING CHANGE PROPOSAL MISSOURI DEPARTMENT OF TRANSPORTATION

#3	Date <u>07/14/08</u>
Contract ID 080523-403	Job No. <u>14P2020</u>
County Lafayette Ro	oute 24 Original Bid Cost \$96,873.70
Contractor APAC-Missouri, Inc.	By Casey Castrop
Designed By MoDOT	Phone 573-449-0886
VECP# VECP Q8-	7 \ VECP \subseteq or VECP/PDU \subseteq
The plans show paving 3.5" of BP-1 on th	and proposed change(s). Advantages/Disadvantages the concrete approaches at Tabo Creek. APAC is proposing to the 3.75" x 4" on shoulders adjacent to the concrete, and the sto the ends of the concrete pavement.
2. Estimate of reduction in construction	costs. \$96,533.94
3. Prediction of any effects the proposed maintenance and operations.	change(s) will have on other department costs, such as
None anticipated	
4. Anticipated date for submittal of detainment of Specifications.	iled change(s) of items required by Section 104.6 of the
	(date)
5. Deadline for issuing a change order to completion time or delivery schedule.	obtain maximum cost reduction, noting the effect of contract
August 1, 2008	
(date)	(effect)
6. Dates of any previous or concurrent s	ubmission of the same proposal.
	(date and/or dates)

Additional Comments:

** Portion Below This Line To Be Filled Out by MoDOT **

	<u> </u>	
Comments: 52	E ATTACHED	
Justos partinos de la provincia	THE RESERVE THE PROPERTY OF TH	Article Williams of Section States and Artist
•		
		7/21/08
	The state of the s	
	Submitted By Resident Engineer	
	ONCUR WITHEHE RES RE	BEOMMENDATON.
Comments: —	ONCOR WITHERE PES	
		(CON)
•	Ch 1 + 11	11/-
	Smath a. W	
Approval		
Recommended		8/25/08
A Rejection	District Engineer	Date
Recommended	District English	
Comments:	ETISTING CONFRETE P	PARMENT IS IN
	POOR CONDITION AND 7.	
	• •	ME OVELLAY
	15 MERIDRO.	
/	David D. GOOM	a b c c c c c c c c c c
Approval	MONCY MY	128213 9-208
1 ·	State Construction and Materia	
Rejection	State Construction and Wateria	an mignion

Distribution:

Resident Engineer, Project Manager, District Operations Engineer, State Construction and Materials Engineer *Value Engineering Administrator - *MoDOT, P.O. Box 270, Jefferson City, MO 65102

Concrete Section @ Tabo Creek LM 49.803-50.085 & LM 50.146-50.604

Eliminate 3.5" BP-1	2006 tons @ \$47.95/ton	\$96,187.70
	•	\$686.00
Reduce Shoulder to 4'	283.38 tons @ \$47.95/ton	\$13,588.07
Total Savings		\$110,461.77
		\$3,907.20 \$1,020.63 \$4,000.00 \$5,000.00 \$13,927.83
Total Net Savings	•	\$96,533.94
	Reduce Milling Transitions Reduce Shoulder to 4' Total Savings Pavement Stripe Removal Subgrade/Shouldering Add Widener for Shoulder Paving Add 4' Mill for Shouldering Operat Total Costs	Reduce Milling Transitions Reduce Shoulder to 4' Total Savings Pavement Stripe Removal Subgrade/Shouldering Add Widener for Shoulder Paving Add 4' Mill for Shouldering Operation Total Costs

MEMORANDUM



Missouri Department of Transportation

Construction Richmond Project Office

TO:

Perry Allen-4co

CC:

File

FROM:

Brian K. Iles

Resident Engineer

DATE:

July 21, 2008

SUBJECT:

VE Concept Proposals

Job No. J4P2020 and J4M0202

Contract ID 080523-403

Route 24 and Route P, Lafayette County

Attached are five Construction Value Engineering Concept Proposals for the above referenced projects submitted by APAC-MO. The following are my recommendations for each VECP. Feel Free to contact me with any questions or comments.

VECP No. 1 – J4M0202 (Rte. P)

The contractor proposes eliminating the modified cold milling on the north and south end of this project. The north end of Rte. P ends at railroad tracks. There is a gravel entrance for the railroad to access the tracks. The contract includes crushed stone for this entrance. The south end of Rte. P ends at Rte. 24. The Project Manager, Paul Boenishch, indicated that this project was designed to be let alone and that is why the modified milling was included in the contract at the Rte. 24 intersection. Since the project was let combination with the Rte. 24 overlay, the modified milling is unnecessary. APAC intends to install the Rte. 24 overlay prior to overlaying Rte. P. There will be a 1.75-inch elevation difference between Rte. 24 and Rte. P for approximately two weeks. MoDOT will require the contractor to install a wedge until the Rte. P overlay is connected to Rte. 24.

I recommend approval of this Construction Value Engineering Concept Proposal No. 1.

VECP No. 2 – J4M0202 (Rte. P)

The contractor proposes installing 1.75-inches of BP-1 in lieu of the contract specified 0.5-inch of BP-3 and 1.25-inch of BP-2. Rte. P has significant rutting caused by trucks used to repair the railroad bed after the flooding that occurred the spring of 2007. This contract does not include quantity for irregularities. The BP-3 will overrun significantly to backfill the rutting. If used, the BP-1 would significantly overrun as well, which would negate any savings. This roadway needs a surface leveling before installation of a surface lift. In addition, the BP-3 is a better mix for backfilling the severe irregularities. Therefore, I recommend this proposal be denied.

VECP No. 3 - J4P2020 (Rte. 24)

The contractor proposes eliminating the 3.5-inch BP-1-overlay on the mainline concrete adjacent to the Tabo Creek Bridge but still install 3.75-inch, 4-foot wide shoulders. The existing concrete surface is in poor condition. In fact, this stretch will receive nearly 195 pavement repairs as part of this project. On July 10 2008, MoDOT determined to change the overlay thickness on the concrete from 3.50-inches to a minimum thickness of 2.75-inches to avoid encountering steel when conducting modified milling. MoDOT informed the contractor of this in a letter dated July 10, 2008. I recommend this proposal be denied because of the poor condition of the existing concrete.

VECP No. 4 - J4P2020 (Rte. 24)

The contractor proposes using a tack coat in lieu of a prime coat on the existing shoulders. APAC-MO inquired about this item in a phone call on July 14, 2008. There was no mention of value engineering at the time of the phone conversation with the contractor. This office contacted central office for a recommendation on the same day. Central Office informed this office that no prime is necessary. MoDOT informed the contractor that the prime was unnecessary in a letter dated July 14, 2008. Therefore, MoDOT did inform the contractor of the underrun prior to this proposal submittal. As result, I recommend the proposal be denied or only be considered as a practical engineering savings (75/25).

VECP No. 5 - J4P2020 (Rte. 24)

<u>VECP No. 5 - J4P2020 (Rte. 24)</u>
MoDOT has requested the contractor submit information about the existing roadway condition before MoDOT will consider the proposal for acceptance. We requested at least one core per mile to adequately indicate the condition of the roadway. The contractor has agreed to do this. My recommendation will be based on the results of the cores.

BRIAN INFORMED ME THAT CORES DETERMIQUED THAT STRIPPING EXISTS IN SUB COURSES, THIS PRECLUDES: ANY MILLING UNLESS FULL REMOVAL. SINCE THIS IS NOT THE SCOPE, IRECOMMEND DENIALOF THIS VECP NO.5.

VALUE ENGINEERING CHECK SHEET

□ Bridge/Structure/Footings

X Paving (PCCP, ect.) □ Grading/MSE Walls □ Signal/Lighting/ITS □ Misc. ____

□ TCP/MOT

TYPE OF WORK (Check one that applies) □ Drainage Structures (RCP, RCB, CMP's, ect.)

SUMMARY OF PROPOSAL (If needed, condense summary to a couple of lines)	
Underrun mainline overlay.	

If the proposal is large, please mark or make note, which pages need to be scanned into there are special instructions, make note of them here.	
•	the database. If
Proposal is not large.	4